THE WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

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NORTH ATLANTIC OCEAN

By F. A. Young

With the exception of a tropical disturbance of slight intensity and a few local squalls, that will be described later, the North Atlantic during the current month was unusually free from heavy weather. Up to the time of writing only 15 vessels have rendered storm reports, and of these only 2 recorded a wind force as high as 10, while gales were not reported on more than one day in any 5°

There was an intrusion of low pressure over the region usually occupied by the North Atlantic high during the first 12 days of the month, while from the 13th to the 30th this center of action was well developed.

The number of days on which fog was reported in different sections of the ocean is as follows: Over the Grand Banks, from 10 to 15 days; along the American coast, north of the thirty-fifth parallel, from 12 to 19 days; over the northern steamer lanes, between the tenth and forty-fifth meridians, from 3 to 5 days; along the European coast, from 1 to 9 days.

Table 1.—Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m (seventy-fifth meridian), North Atlantic Ocean, June, 1931

Stations	Average pressure	Depar- ture	High- est	Date	Lowest	Date
Julianehaab, Greenland Belle Isle, Newfoundland Halifax, Nova Scotia Nantucket Hatteras Key West New Orleans Cape Gracias, Nicaragua Turks Island Bermuda Horta, Azores Lerwick, Shetland Islands Valencia, Ireland London	29, 84 30, 04 30, 05 30, 15	Inch (2) 3 +0.08 4 -C.05 4 -0.06 4 0.00 4 +0.01 4 +0.03 3 -0.05 4 +0.01 2 -0.08 3 -0.06 3 +0.12 3 -0.02 5 +0.11	Inches 30. 48 30. 42 30. 20 30. 20 30. 10 30. 14 29. 94 30. 50 30. 32 30. 39 30. 39	3d	Inches 29, 64 29, 14 29, 60 29, 66 29, 88 29, 88 29, 84 29, 62 29, 54 29, 54	24th. 23d. 21st.6 8th. 8th. 8th. 28th.5 29th. 2d.5 15th. 10th.

Average of 23 observations.
 No normal available.
 From normals shown on Hydrographic Office Pilot Charts, based on observations at Greenwich mean noon, or 7 a. m., seventy-fifth meridian time.
 From normals based on 8 a. m. observations.
 On other date or dates.

On the 1st there was a fairly well developed low of limited extent, central near 43° N., 25° W., that drifted slowly northeastward, decreasing in intensity. From that date until the 5th a few vessels in the eastern section of the steamer lanes reported winds of force 7 to 9, although moderate weather prevailed over the greater part of this region, as well as over the remainder of the ocean.

From the 6th to 8th moderate gales were again reported between the forty-fifth meridian and the Azores. On the 9th one of the most severe disturbances of the month was central about 300 miles north of the Bermudas; this moved

but little during the next 24 hours, and on the 10th moderate westerly gales were encountered by a number of vessels between the fortieth and forty-fifth parallels.

From the 11th to 13th moderate weather, with comparatively high pressure, was the rule over the greater part of the ocean, and no storm reports were received for that

On the 14th and 15th an area of low pressure was over the steamer lanes, east of the thirtieth meridian, and moderate southwesterly gales occurred over a limited

From the 16th to 24th there ensued a period of unusually quiet weather over practically the entire ocean, with the exception of a moderate low on the 21st, central near 43° N., 52° W.

On the 25th a depression was over the peninsula of Yucatan, that afterwards developed into a moderate tropical disturbance. On the daily weather map for June 26 it is stated: "A disturbance of moderate intensity is apparently central in the south-central portion of the Gulf of Mexico." On the 27th the center of this disturbance was about 100 miles east-northeast of Brownsville, Tex., and on the 28th over the coast of western Texas. The Honduran steamship *Choluteca* was the only vessel rendering a report of this storm, as shown in table.

Charts VIII to X cover the period from the 23d to 25th, inclusive. Charts VIII and IX give an idea of the weather encountered by Messrs. Post and Gatty on the first two days of their around-the-world flight, and Chart X is drawn to show the conditions on the 25th, when

Messrs. Hillig and Hoiriis landed in Germany.

Notes.—British steamship Olna; captain, P. Skone-Rees; observer, Sydney Mitchell, chief officer. Montreal to Port Arthur:

June 19, 1931, from 4 p. m. to 5:30 p. m. A. T. S.: A heavy electrical storm; clouds, Ci.-Cu., Cu. and Cu.-Nimb. Continual thunder and lightning. Occasional squalls traveling from NW. to SE., with an inclination to the southward and SW. This was preceded by a remarkable display of waterspouts, as many as five being seen at the same time and reforming as quickly as they dispersed. Position, between 24° 25′ N., 82° 08′ W., at beginning to 24° 25′ N., 82° 20′ W., at end.

Greek steamship Okeania; captain, Isadore M. Carivalis; observer, Master. Gibraltar to Baltimore:

Waterspout, June 4, in 36° 14′ N., 56° 37′ W., 6:30 p. m. ship time. Observed waterspout on starboard bow (ship course west) 3 miles distant. Lasted until 7:30 p. m. Barometer 29.81 (corrected); clouds Cu.-Nb. from SW., 7 to 10. Air temperature, 66; water, 72.

American steamship San Julian; captain, G. V. Spankie; observer, M. Sander, chief mate. From Philadelphia to Canal Zone:

June 29, 3:30 a. m. E. S. T., in 16° 00' N., 75° 40'; wind NW., 4. Vessel entered very heavy electrical disturbance. Lightning, thunder, and torrential rain; wind calm and variable. At 7 a. m. in 15° 30′ N., 75° 50′ W., wind SE., 3, then to NE., 3, and calm in afternoon. About one hour before entering this, wind had been NE., 4, then shifted to NW. When near the center the thunder and lightning were almost continuous.